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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/767,347	01/30/2004	Andrej S. Mitrovic	245045US6YA 5237	
22850	7590 07/07/2006	EXAMINER		
•	IVAK, MCCLELLAN	WACHSMAN, HAL D		
1940 DUKE STREET ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			2857	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati	on No.	Applicant(s)				
Office Action Survey		10/767,3	17	MITROVIC ET AL.				
	Office Action Summary	Examine		Art Unit				
		Hal D. Wa	chsman	2857				
Period fo	The MAILING DATE of this communication or Reply	appears on the	cover sheet with the c	orrespondence ad	ldress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on 6	1 May 2006						
•	This action is FINAL . 2b)⊠ This action is non-final.							
′=	<i>,</i> —							
∪(∨	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
closed in accordance with the practice under Ex parte Quayle, 1999 C.D. 11, 400 C.C. 210.								
Dispositi	on of Claims							
4)⊠	Claim(s) <u>1-41</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)🖂	Claim(s) <u>1-40</u> is/are allowed.							
6)🖂	Claim(s) <u>41</u> is/are rejected.							
·								
	Claim(s) are subject to restriction and/or election requirement.							
			•					
Applicati	on Papers							
9)⊠ The specification is objected to by the Examiner.								
10)⊠ The drawing(s) filed on <u>23 August 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) 🔲 Notic 3) 🔲 Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948 mation Disclosure Statement(s) (PTO-1449 or PTO/SE r No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te	O-152)			

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Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission (after-final amendment) filed on 3-1-06 has been entered.

- 2. The information disclosure statement filed 9-6-05 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because there was not a PTO-1449 form accompanying this IDS which lists the reference(s) to be considered. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).
- 3. Paragraph 0048 of the specification cites U.S. patent application serial numbers 10/398,652 and 10/168,544, but does not provide the current status of these applications. Appropriate correction is required.

4. Claims 1-41 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 1, line 5, cites "a plurality of process runs" however is this referring to manufacturing process runs? This same type of problem also occurs in claim 24. Claim 1, lines 8-9, cite ".. based at least on a strength of the detected portion of the radiation beam" however in stating "at least on" ambiguity is added to the claim with respect to what else may also be used here in addition to the strength of the detected portion of the radiation beam upon which to base the generation of the radiation level signal on. This same type of problem also occurs in claims 12-14, 22-24, 26, 28, 38, 40, 41. Claim 16, lines 1-2, cite "said means for determining" however exactly which means for determining is being referred to here? Claim 19, line 2, cites "the controlling means" which lacks antecedent basis. This same type of problem also occurs in claims 22, 23. In claim 21, line 1, it appears that the word "the" is missing between the words "of" and "emitting". Claim 25, lines 2-3, cite "... said strength of said radiation level signal" however it appears that the antecedent basis is "strength of the detected portion of the radiation beam". Claim 26, line 1, cites "said determining" however exactly which "determining" is being referred to here ? This same type of problem also occurs in claims 35, 38. Claim 26, line 6, cites "the measuring step" which lacks clear antecedent basis. Claim 26, line 9, cites "the first thickness" which lacks antecedent basis. Claim 29, line 2, cites "the process" however is this referring to the manufacturing process? This same type of problem also occurs in claim 31. Claim 39, lines 1-2, cite "... the step of determining an initial thickness..." however is this referring to the step of measuring

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an initial thickness? The preamble of claim 41 cites "A method for monitoring consumption of a component.." however the body of claim 41 does not make any reference to the consumption of a component. This same type of problem also occurs in claim 40. The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. (US 2004/0014250 A1) in view of Meeks et al. (6,392,749).

As per claim 41, Peterson et al. disclose a method for monitoring consumption of a component comprising: "emitting a radiation beam onto a first area of a component" (figure 1, part 108); "detecting a portion of the radiation beam that is refracted by the component" (figure 1, part 110); "generating a radiation level signal based at least on a strength of the detected portion of the radiation beam" (figure 1, part 114); and "determining an initial thickness of the component based on said radiation level signal" (figure 3, part 302). It appears though that Peterson et al. does not clearly disclose "identifying at least one of a manufacturer, a serial number, and a part type of the component based at least on the initial thickness of the component". However, Meeks et al. (col. 13 lines 2-11, 25-32, 49-67, col. 14 lines 1-6, col. 18 lines 54-57, 65-67, col. 19 lines 7-15, col. 22 lines 41-57, col. 23 lines 15-18, col. 25 lines 10-42, col. 29 lines 2-7, 14-17) teach this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Meeks et al. to the invention of Peterson et al. as specified above because Peterson et al. (page 3, claim 5) disclose solving for the thickness of a layer using the index of refraction and Meeks et al. (col. 19 lines 7-8, 9-12) teach that manufacturers make thin film disks with a known carbon overcoat thickness and the knowledge of absolute thickness and the complex indices of refraction of the carbon allow one to construct calibration curves and as a result one can determine the amount of carbon wear.

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7. Claims 1-40 are allowed subject to the appropriate correction of the 37 C.F.R. 1.75(a) objections noted in paragraph 4 above.

- 8. The following references are cited as being art of additional general interest: Meeks et al. (6,717,671) which disclose measuring lubricant thickness and degradation as well as carbon wear and thickness, Kim et al. (US 2004/0246493 A1) which disclose two-dimensional refrectometry, Srivastava et al. (6,943,357) which disclose determining remaining useful life of a thermal barrier coating and Yang (6,483,585) which discloses the providing of an assessment of film thickness.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D. Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

> **Primary Examiner** Art Unit 2857

HW July 1, 2006